

**Translation**

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>M/44127-PCT</b>	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. <b>PCT/EP2004/006919</b>	International filing date (day/month/year) <b>25.06.2004</b>	Priority date (day/month/year) <b>26.06.2003</b>
International Patent Classification (IPC) or national classification and IPC		
Applicant <b>BASF AKTIENGESELLSCHAFT</b>		

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>7</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (sent to the applicant and to the International Bureau) a total of <u>4</u> sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>	
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input checked="" type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>	

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/006919

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
    - ☐ international search (Rule 12.3 and 23.1(b))
    - ☐ publication of the international application (Rule 12.4)
    - ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
  - ☐ the international application as originally filed/furnished
  - ☒ the description:
    - pages 1-20 \_\_\_\_\_ as originally filed/furnished
    - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
    - pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - ☒ the claims:
    - nos. \_\_\_\_\_ as originally filed/furnished
    - nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
    - nos.\* 1-14 \_\_\_\_\_ received by this Authority on 27.05.2005 with letter of 25.05.2005
    - nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - ☐ the drawings:
    - sheets \_\_\_\_\_ as originally filed/furnished
    - sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
    - sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
  - ☐ the description, pages \_\_\_\_\_
  - ☐ the claims, nos. \_\_\_\_\_
  - ☐ the drawings, sheets/figs \_\_\_\_\_
  - ☐ the sequence listing (*specify*): \_\_\_\_\_
  - ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
  - ☐ the description, pages \_\_\_\_\_
  - ☐ the claims, nos. \_\_\_\_\_
  - ☐ the drawings, sheets/figs \_\_\_\_\_
  - ☐ the sequence listing (*specify*): \_\_\_\_\_
  - ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application

☒ claims Nos. 1

because:

☐ the said international application, or the said claims Nos. \_\_\_\_\_  
relate to the following subject matter which does not require an international preliminary examination (*specify*):

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. \_\_\_\_\_  
are so unclear that no meaningful opinion could be formed (*specify*):

☒ the claims, or said claims Nos. 1 are so inadequately supported  
by the description that no meaningful opinion could be formed.

☐ no international search report has been established for said claims Nos. \_\_\_\_\_

☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:

the written form

☐ has not been furnished

☐ does not comply with the standard

the computer readable form

☐ has not been furnished

☐ does not comply with the standard

☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.

☒ See Supplemental Box for further details.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

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**Box No. V** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	<u>2, 14</u>	YES
	Claims	<u>3-13</u>	NO
Inventive step (IS)	Claims	<u>2, 14</u>	YES
	Claims	<u>3-13</u>	NO
Industrial applicability (IA)	Claims	<u>2-14</u>	YES
	Claims	<u></u>	NO

## 2. Citations and explanations (Rule 70.7)

2.1 The subject matter claimed in claims 2 and 14 is novel over the documents cited in the international search report, since none of those documents discloses the technical features of the invention (PCT Article 33(2)).

2.2 An inventive step can also be acknowledged with respect to the subject matter claimed in claims 2 and 14, since the specific combination of the technical features of the invention cannot be derived in an obvious manner from one or from a combination of two or more of the documents cited in the international search report (PCT Article 33(3)).

3. This report makes reference to the following documents:

D1: WO 02/48215 A (BASF AG; LANGE ARNO (DE); RATH HANS PETER (DE)) 20 June 2002 (2002-06-20)

D2: WO 02/48216 A (BASF AG; LANG GABRIELE (DE); HUEFFER STEPHAN (DE); RATH HANS PETER (D) 20 June 2002 (2002-06-20)

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
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D3: WO 02/096964 A (BASF AG; LANG GABRIELE (DE);  
HUEFFER STEPHAN (DE); RATH HANS PETER (D)  
5 December 2002 (2002-12-05)

- 4.1 Document D1 discloses the use as per the invention of 2-chloro-2-methylbutene-3; see claim 1, formula I-B and line 21 on page 7 of D1. It should be noted that it is clear from formula I-B that in line 21 on page 7 of D1 the incorrect "2-chloro-2-methylbutene-2" should read "2-chloro-2-methylbutene-3".
- 4.2 Document D2 discloses the use as per the invention of 2-chloro-2-methylbutene-3; see claim 1, formula I-B and line 36 on page 5 of D2. It should be noted that it is clear from formula I-B that in line 36 on page 5 of D2 the incorrect "2-chloro-2-methylbutene-2" should read "2-chloro-2-methylbutene-3".
- 4.3 Document D3 discloses the use as per the invention of 2-chloro-2-methylbutene-3; see claim 1, formula I-B and line 6 on page 11 of D3. It should be noted that it is clear from formula I-B that in line 6 on page 11 of D3 the incorrect "2-chloro-2-methylbutene-2" should read "2-chloro-2-methylbutene-3".
- 4.4 It is not clear why the use as per the invention of 2-chloro-2-methylpentene-4 or of 2-chloro-2,4,4-trimethylhexene-5 is inventive in relation to the teaching of D1 to D3.

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
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4.5      Consequently, claims 3 to 13 fail to meet the PCT requirements for inventive step.

5.        Industrial applicability is established (PCT Article 33(4)).

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Box III:

1. The feature "wherein in A.1 m stands for 0 and n stands for 1 or 2 or m stands for 1 and n stands for 0, 1 or 2" contravenes PCT Article 34(2)(b).